Abstract of the Disclosure

A method for treating an article which involves exposing an article within a space . to a concentration of chlorine dioxide gas that exceeds the IDLH, STEL or TLV, then reducing the concentration of chlorine dioxide gas within the space to a positive quantity below the IDLH, STEL or TVL. Thereafter, additional chlorine dioxide gas is introduced into the space, but the concentration within the space remains below the IDLH, STEL or TVL.